AMENDMENTS TO THE CLAIMS

1-38. (canceled)

39. (currently amended) A method for delivering at least a first and second source chemical into a deposition chamber, comprising:

conveying the first source chemical by a first line to a plurality of first piezoelectric flow regulators proximate to first holes in communication with the chamber; [[and]]

conveying the second source chemical by a second line to a plurality of second piezoelectric flow regulators proximate to second holes in communication with the chamber;

independently controlling the first flow regulators to control the flow of the first source chemicals to the chamber; and

independently controlling the second flow regulators to control the flow of the second source chemicals to the chamber.

40-41. (canceled)

42. (currently amended) The method of claim [[40]] 39, wherein the chamber includes a shower head for housing the first and second flow regulators devices and the first and second lines.

43. (original) The method of claim 39, wherein the first and second holes are located in an area on the chamber, and wherein the first and second holes are evenly distributed about the area.

44. (original) The method of claim 43, further comprising a shower head, and wherein the area is located on the shower head.

45. (currently amended) The method of claim [[40]] 39, wherein either first or second flow regulators vaporizes either the first or second source chemicals.

46-47. (canceled)

48. (currently amended) The method of claim [[46]] 39, wherein the first flow regulators are controlled in unison, and the second flow regulators are controlled in unison.

49. (original) The method of claim 39, further comprising vaporizer the either the first or second source chemicals respectively in the first line or the second line.

50. (original) The method of claim 39, further comprising controlling the flow of either the first or second source chemical respectively in the first line or the second line.

51-53. (canceled)

54. (currently amended) A method of depositing a film on a work piece in a deposition chamber, wherein the deposition chamber comprises a plurality of first holes in communication with a first source chemical and a plurality of second holes in communication with a second source chemical, the method comprising, in order:

(a) conveying the first source chemical through first piezoelectric flow regulators proximate to the first holes and into the chamber for a first period of time, wherein during the first period of time the first flow regulators are independently controlled to control the flow of the first source chemicals to the chamber;

(b) conveying the second source chemical through second piezoelectric flow regulators proximate to the second holes and into the chamber for a second period of time after the first period of time, wherein during the second period of time the second flow regulators are independently controlled to control the flow of the second source chemicals to the chamber; and

repeating steps (a) and (b) to complete deposition of the film.

55. (canceled)

56. (original) The method of claim 54, wherein the first and second holes are located on a shower head coupled to the deposition chamber.

57. (canceled)

58. (original) The method of claim 54, further comprising:

purging the first source chemical from the chamber after step (a); and

purging the second source chemical from the chamber after step (b).

59. (original) The method of claim 54, wherein the first source chemical comprises titanium, and wherein the second source chemical comprises nitride.

60. (currently amended) The method of claim 54, wherein the deposition chamber comprises a plurality of third holes in communication with a third source chemical, and wherein the method further comprises, after step (b):

(c) conveying the third source chemical through third piezoelectric flow regulators proximate to the third holes and into the chamber for a third period of time after the second period of time, wherein during the third period of time the third flow regulators are independently controlled to control the flow of the third source chemicals to the chamber; and

repeating steps (a), (b), and (c) to complete deposition of the film.

61. (original) The method of claim 60, further comprising:

purging the first source chemical from the chamber after step (a);

purging the second source chemical from the chamber after step (b); and

purging the third source chemical from the chamber after step (c).

62. (original) The method of claim 60, wherein the first, second, or third source chemicals contain an element selected from the group of titanium, barium, or strontium.

63. (original) The method of claim 60, wherein the film is a BST oxide.

64. (original) The method of claim 60, further comprising conveying an oxidizer to the chamber after step (c).

Serial No. 10/762,847
Clean Copy of Pending Claims for Examiner's Convenience

1-38. (canceled)

39. (currently amended) A method for delivering at least a first and second source chemical into a deposition chamber, comprising:

conveying the first source chemical by a first line to a plurality of first piezoelectric flow regulators proximate to first holes in communication with the chamber;

conveying the second source chemical by a second line to a plurality of second piezoelectric flow regulators proximate to second holes in communication with the chamber;

independently controlling the first flow regulators to control the flow of the first source chemicals to the chamber; and

independently controlling the second flow regulators to control the flow of the second source chemicals to the chamber.

40-41. (canceled)

42. (currently amended) The method of claim 39, wherein the chamber includes a shower head for housing the first and second flow regulators devices and the first and second lines.

43. (original) The method of claim 39, wherein the first and second holes are located in an area on the chamber, and wherein the first and second holes are evenly distributed about the area.

44. (original) The method of claim 43, further comprising a shower head, and wherein the area is located on the shower head.

45. (currently amended) The method of claim 39, wherein either first or second flow regulators vaporizes either the first or second source chemicals.

46-47. (canceled)

48. (currently amended) The method of claim 39, wherein the first flow regulators are controlled in unison, and the second flow regulators are controlled in unison.

49. (original) The method of claim 39, further comprising vaporizer the either the first or second source chemicals respectively in the first line or the second line.

50. (original) The method of claim 39, further comprising controlling the flow of either the first or second source chemical respectively in the first line or the second line.

51-53. (canceled)

54. (currently amended) A method of depositing a film on a work piece in a deposition chamber, wherein the deposition chamber comprises a plurality of first holes in communication with a first source chemical and a plurality of second holes in communication with a second source chemical, the method comprising, in order:

(a) conveying the first source chemical through first piezoelectric flow regulators proximate to the first holes and into the chamber for a first period of time, wherein during the first period of time the first flow regulators are independently controlled to control the flow of the first source chemicals to the chamber;

(b) conveying the second source chemical through second piezoelectric flow regulators proximate to the second holes and into the chamber for a second period of time after the first period of time, wherein during the second period of time the second flow regulators are independently controlled to control the flow of the second source chemicals to the chamber; and

repeating steps (a) and (b) to complete deposition of the film.

55. (canceled)

56. (original) The method of claim 54, wherein the first and second holes are located on a shower head coupled to the deposition chamber.

57. (canceled)

58. (original) The method of claim 54, further comprising:

purging the first source chemical from the chamber after step (a); and

purging the second source chemical from the chamber after step (b).

59. (original) The method of claim 54, wherein the first source chemical comprises titanium, and wherein the second source chemical comprises nitride.

60. (currently amended) The method of claim 54, wherein the deposition chamber comprises a plurality of third holes in communication with a third source chemical, and wherein the method further comprises, after step (b):

(c) conveying the third source chemical through third piezoelectric flow regulators proximate to the third holes and into the chamber for a third period of time after the second period of time, wherein during the third period of time the third flow regulators are independently controlled to control the flow of the third source chemicals to the chamber; and

repeating steps (a), (b), and (c) to complete deposition of the film.

61. (original) The method of claim 60, further comprising:

purging the first source chemical from the chamber after step (a);

purging the second source chemical from the chamber after step (b); and

purging the third source chemical from the chamber after step (c).

62. (original) The method of claim 60, wherein the first, second, or third source chemicals contain an element selected from the group of titanium, barium, or strontium.

63. (original) The method of claim 60, wherein the film is a BST oxide.

64. (original) The method of claim 60, further comprising conveying an oxidizer to the chamber after step (c).